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EXAMINER

KASSA, HILINA S

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/749,525
Filing Date: December 31, 2003
Appellant(s): GREGORY, RICHARD T.

Richard T. Gregory
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 05/12/2008 appealing from the Office action mailed 02/11/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

7,099,027	Berry et al.	8-2006
2004/0158654	Shima	8-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-11, 15-25 and 28-30 are rejected under 35 U.S.C. 102(e) as being anticipated by **Berry et al.** (US Patent Number 7,099,027 B1).

Regarding claim 1: As shown in figures 1a-1b, Berry et al. disclose a method for distributed processing of print jobs using multiple printer processors and centralized printing (**118, 164, figure 1b**), comprising the steps of:

dividing a print job into a plurality of print job segments in a print distribution module (**column 4, lines 24-30; note that print job gets divided into multiple portions**);

transmitting the plurality of print job segments to one or more distribution responsive printers (**column 4, lines 31-38; note that the segmented print jobs get sent to the selected RIP engine i.e. PRINT1, figure 1b**);

processing the plurality of print job segments into a plurality of print engine-ready data segments (**column 5, lines 41-49; column 9, lines 49-54; note that the segments are processed into PDL**) using the one or more distribution responsive printers (**column 4, line 65-column 5, line 4; note that the segmented print job gets processed**);

assembling the plurality of print engine-ready data segments received from the one or more distribution responsive printers at the print distribution module (**column 5, lines 4-10; note that the segmented job gets provided by the distributor to the RIP engine i.e. PRINT1, figure 1b**); and

printing the assembled plurality of print engine-ready data segments at a target
printer when the plurality of segments is received from the print distribution module
(**column 5, lines 14-18; note that the outputs of the RIP engines or PRINT1-n of
figure 1b gets outputted or printed in along path 164 of figure 1b).**

Regarding claim 2: Berry et al. further disclose, a method as in claim 1, further
comprising the step of sending the print job from a digital device to the print distribution
module (**column 21, lines 41-45; note that the printer is connected to the
computer).**

Regarding claim 3: Berry et al. further disclose, a method as in claim 2, wherein
the step of sending the print job from a digital device to a print distribution module
further comprises the step of sending the print job from the digital device to the print
distribution module through a wired connection (**column 21, lines 50-55; note that the
print job could be distributed by wired connection).**

Regarding claim 4: Berry et al. further disclose, a method as in claim 2, wherein
the step of sending the print job from a digital device to the print distribution module
further comprises the step of sending the print job from the digital device to the print
distribution module through a wireless connection (**column 21, lines 50-55; note that
the print job could be distributed by wireless connection).**

Regarding claim 5: Berry et al. further disclose, a method as in claim 2, wherein the step of sending the print job further comprises the step of sending the print job from a digital device to a print distribution module through a computer network (**column 21, lines 41-47; note that the printer is connected to the computer via a network**).

Regarding claim 6: Berry et al. further disclose, a method, as in claim 1, further comprising the step of configuring firmware of the one or more distribution responsive printers to receive print job segments in a variety of common print languages (**column 3, lines 17-21, lines 25-30; note that the language processor 120 of figure 1a is configured to recognize the specified document's parameter**).

Regarding claim 7: Berry et al. further disclose, a method as in claim 1, wherein the step of dividing the print job further comprises the step of dividing the print job into print job segments that are a single printed page (**column 7, lines 8-16; note that the portion of the print job occupies among the total of pages and each page gets processed separately**).

Regarding claim 8: Berry et al. further disclose, a method as in claim 1, wherein the step of transmitting the plurality of print job segments further involves the step of transmitting a first print job segment of the plurality of print job segments to a target printer to be printed (**column 27, line 66-column 28, line 9; note that the job distributor sends the print file to one of the plurality of the print devices**) and

Art Unit: 2625

transmitting remaining print job segments to the one or more distribution responsive printers (**column 28, lines 12-16; note that the distributor makes its own decision to how to distribute the RIPPED pages to various marking engines**).

Regarding claim 9: Berry et al. further disclose, a method as in claim 1, wherein the step of processing the plurality of print job segments further comprises the step of processing the plurality of print job segments using two or more distribution responsive printers (**column 5, lines 36-4**).

Regarding claim 10: Berry et al. further disclose, a method as in claim 1, wherein the step of assembling the plurality of print engine-ready data segments further involves the step of sending the plurality of print engine-ready data segments from the print distribution module to the target printer (**column 27, line 66-column 28, lines 3; note that in figure 24, it is shown that the job distributor 1904 sends the segments of data to the virtual printer 2404**).

Regarding claim 11: Berry et al. further disclose, a method as in claim 1, further comprising the step of determining which types of distribution responsive printer connected to the network will be used for processing the print job (**column 21, lines 50-55**).

Regarding claim 15: Berry et al. further disclose, a method as in claim 1, wherein the step of assembling the plurality of print engine-ready data segments further comprises the step of assembling the plurality of print engine-ready data segments from the distribution responsive printers by querying the one or more distribution responsive printers with the print distribution module (**column 28, lines 37-47**).

Regarding claim 16: Berry et al. further disclose, a method as in claim 1 wherein the step of assembling the plurality of print engine-ready data segments further comprises the step of transmitting the plurality of print engine-ready data segments from the distribution responsive printers to the print distribution module (**column 11, lines 14-36; note that the plurality of the segments or pages and the segments get distributed as shown in 502 figure 5b**).

Regarding claim 17: Berry et al. further disclose, a method as in claim 16, wherein the step of transmitting the plurality of print *engine-ready data* segments is performed immediately after an individual print *engine-ready data* segment from the plurality of print job segments has completed processing (**column 13-21; note that each segment gets processed according to the numerical label**).

Regarding claim 18: Berry et al. further disclose, a printing system to distribute processing of print jobs using multiple printer processors and centralized printing (**118, 164, figure 1b**), comprising:

a print distribution module configured to divide a print job into a plurality of print job segments (**column 4, lines 24-30; note that print job gets divided into multiple portions**);

a distribution responsive printer configured to receive and process one or more of the plurality of print job segments from the print distribution module (**column 4, line 65-column 5, line 4; note that the segmented print job gets processed**) into one more print engine-ready data segments (**column 5, lines 41-49; column 9, lines 49-54; note that the segments are processed into PDL**); and

wherein the print distribution module is further configured to assemble one or more print engine-ready data segments from the distribution responsive printer after processing (**column 5, lines 14-18; note that the outputs of the RIP engines or PRINT1-n of figure 1b gets outputted or printed in along path 164 of figure 1b**).

Regarding claim 19: Berry et al. further disclose, a system as in claim 18, wherein the print distribution module is configured to transmit a first print job segment of the plurality of print job segments to a target printer to be printed (**column 27, line 67-column 28, line 3**).

Regarding claim 20: Berry et al. further disclose, a system as in claim 19, wherein the print distribution module is configured to transmit a remainder of the print job segments to one or more distribution responsive printers (**column 28, lines 12-16**).

Regarding claim 21: Berry et al. further disclose, a system as in claim 20, wherein the target printer is a distribution responsive printer (**column 28, lines 6-12**).

Regarding claim 22: Berry et al. further disclose, a system as in claim 18, wherein the print distribution module is configured to divide and transmit a remainder of the print job segments between one or more distribution responsive printers and the target printer (**column 27, line 66-column 28, line 16**).

Regarding claim 23: Berry et al. further disclose, a system as in claim 18, wherein the printing system further comprises a computer network (**column 21, lines 41-47; note that the printer is connected to the computer via a network**).

Regarding claim 24: Berry et al. further disclose, a system as in claim 23, wherein a digital device is connected to the network to send a print job (**column 21, lines 41-45; note that the printer is connected to the computer**).

Regarding claim 25: Berry et al. further disclose, a system as in claim 24, wherein the digital device is configured to transmit a print job to the print distribution module (**column 21, lines 50-55**).

Regarding claim 28: Berry et al. further disclose, a system as in claim 20, wherein the print distribution module is configured to query one or more distribution

Art Unit: 2625

responsive printers to which a remainder of the print job segments have been sent **(column 27, line 66-column 28, line 3)**, and assemble the remainder of the print engine-ready data segments when one or more distribution responsive printers have completed processing the remainder of the print engine-ready data segments **(column 28, lines 12-16)**.

Regarding claim 29: Berry et al. further disclose, a system as in claim 28, wherein the print distribution module is configured to receive print engine-ready data segments from processing of a remainder of the print job segments at the distribution responsive printers as soon as the print engine-ready data segments are available **(column 28, lines 12-16; note that the distributor makes the decision in the presence of segments of print job)**.

Regarding claim 30: Berry et al. further disclose, a printing system to distribute processing of print jobs using multiple printer processors and centralized printing **(118, 164, figure 1b)**, comprising:

a print distribution means for dividing a print job into a plurality of print job segments **(column 4, lines 24-30; note that print job gets divided into multiple portions)**;

a distribution responsive printer means for receiving and processing one or more of the plurality of print job segments from the print distribution means **(column 4, line 65-column 5, line 4; note that the segmented print job gets processed)** into one or

Art Unit: 2625

more print engine-ready data segments (**column 5, lines 41-49; column 9, lines 49-54; note that the segments are processed into PDL**);

wherein the print distribution means is further configured to assemble one or more print engine-ready data segments from the distribution responsive printer after processing (**column 5, lines 4-10; note that the segmented job gets provided by the distributor to the RIP engine i.e. PRINT1, figure 1b**); and

a target printer means for receiving the one or more print engine-ready data segments from the print distribution means and for printing the one or more print engine-ready data segments (**column 5, lines 14-18; note that the outputs of the RIP engines or PRINT1-n of figure 1b gets outputted or printed in along path 164 of figure 1b**).

Regarding claim 31: Berry et al. further disclose, an article of manufacture, comprising:

a computer usable medium having computer readable program code embodied therein for distributed processing of print jobs using multiple printer processors and centralized printing (**118, 164, figure 1b**), the computer readable program code in the article of manufacture comprising:

computer readable program code for dividing a print job into a plurality of print job segments in a print distribution module (**column 4, lines 24-30; note that print job gets divided into multiple portions**);

computer readable program code for transmitting the plurality of print job segments to one or more distribution responsive printers (**column 4, lines 31-38; note that the segmented print jobs get sent to the selected RIP engine i.e. PRINT1, figure 1b**);

computer readable program code for processing the plurality of print job segments into a plurality of print engine-ready data segments (**column 5, lines 41-49; column 9, lines 49-54; note that the segments are processed into PDL**) using the one or more distribution responsive printers (**column 4, line 65-column 5, line 4; note that the segmented print job gets processed**);

computer readable program code for assembling the plurality of print engine-ready data segments from the one or more distribution responsive printers at the print distribution module (**column 5, lines 4-10; note that the segmented job gets provided by the distributor to the RIP engine i.e. PRINT1, figure 1b**); and

computer readable program code for printing the plurality of print engine-ready data segments at a target printer when the plurality of segments is received from the print distribution module (**column 5, lines 14-18; note that the outputs of the RIP engines or PRINT1-n of figure 1b gets outputted or printed in along path 164 of figure 1b**).

Claims 12-14 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berry et al. (US Patent Number 7,099,027 B1) as applied to claims 1 and 18 above, and further in view of Shima (US Publication Number 2004/0158654 A1).

Regarding claim 12: Berry et al. disclose all of the subject matter as described as above except for specifically teaching the step of determining an operational state of each of the two or more distribution responsive printers that are connected to a network.

However, Shima teaches a step of determining an operational state of each of the two or more distribution responsive printers that are connected to a network **(paragraph [0079], lines 1-8; note that the distribution printers are connected to a network; also, in DISP, of figure 2 shows the state of the printer as being ON).**

Berry et al. and Shima are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have a state determination means. The suggestion/motivation for doing so would have been to in order to specify the appropriate distributing printer state (paragraph [0035], lines 4-10). Therefore, it would have been to combine Berry et al. and Shima to obtain the invention as specified in claim 12.

Regarding claim 13: Berry et al. disclose all of the subject matter as described as above except for specifically teaching wherein the step of transmitting the plurality of print job segments to one or more distribution responsive printers, further comprises the

step of transmitting the plurality of print job segments to one or more distribution responsive printers that are determined to be a similar model as the target printer.

However, Shima teaches a step of transmitting the plurality of print job segments to one or more distribution responsive printers, further comprises the step of transmitting the plurality of print job segments to one or more distribution responsive printers that are determined to be a similar model as the target printer (**paragraph [0014], lines 1-11; note that the model of the printing device gets retrieved in order to match the identical model).**

Berry et al. and Shima are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to transmit the plurality of print job segments to one or more distribution responsive printers that are determined to be a similar model as the target printer. The suggestion/motivation for doing so would have been in order to assure the uniform quality of the printing device (paragraph [0014], lines 12-16). Therefore, it would have been to combine Berry et al. and Shima to obtain the invention as specified in claim 13.

Regarding claim 14: Berry et al. disclose all of the subject matter as described as above except for specifically teaching the step of transmitting the plurality of print job segments to one or more distribution responsive printers that are determined to be available by the print distribution module.

However, Shima teaches step of transmitting the plurality of print job segments to one or more distribution responsive printers that are determined to be available by the print distribution module (**paragraph [0082], lines 1-8; note that the distribution printers are connected to a network; also, in DISP, of figure 2 shows the state of the printer as being ON**).

Berry et al. and Shima are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to determine the availability of transmitting the plurality of print job segments to one or more distribution responsive printers. The suggestion/motivation for doing so would have been to in order to specify the appropriate distributing printer state (paragraph [0035], lines 4-10). Therefore, it would have been to combine Berry et al. and Shima to obtain the invention as specified in claim 14.

Regarding claim 26: Berry et al. disclose all of the subject matter as described as above except for specifically teaching, wherein the print distribution module is configured to determine the model and status of each distribution responsive printer connected to a network.

However, Shima teaches wherein the print distribution module is configured to determine the model and status of each distribution responsive printer connected to a network (**paragraph [0014], lines 1-11; note that the model of the printing device gets retrieved in order to match the identical model; paragraph [0082], lines 1-8;**

note that the distribution printers are connected to a network; also, in DISP, of figure 2 shows the state of the printer as being ON).

Berry et al. and Shima are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art wherein the print distribution module is configured to determine the model and status of each distribution responsive printer connected to a network. The suggestion/motivation for doing so would have been in order to assure the uniform quality of the printing device and to determine the availability state (paragraph [0014], lines 12-16). Therefore, it would have been to combine Berry et al. and Shima to obtain the invention as specified in claim 26.

Regarding claim 27: Berry et al. disclose all of the subject matter as described as above except for specifically teaching, wherein the print distribution module is configured to transmit a remainder of the print job segments to one or more distribution responsive printers when the print distribution module has determined the one or more distribution responsive printers are not busy.

However, Shima teaches wherein the print distribution module is configured to transmit a remainder of the print job segments to one or more distribution responsive printers when the print distribution module has determined the one or more distribution responsive printers are not busy (**s32, s33, figure 5; paragraph [0104], lines 1-10; note that the print specification determines the availability state**).

Berry et al. and Shima are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art wherein the print distribution module is configured to transmit a remainder of the print job segments to one or more distribution responsive printers when the print distribution module has determined the one or more distribution responsive printers are not busy. The suggestion/motivation for doing so would have been in order efficiently process the print jobs and to assure the uniform quality of the printing device (paragraph [0014], lines 12-16). Therefore, it would have been to combine Berry et al. and Shima to obtain the invention as specified in claim 27.

(10) Response to Argument

Appellant, on page 18-33, argues that Berry et al. does not teach or suggest, (a) “assembling the plurality of print engine-ready data segments received from the one or more distribution responsive printers at the print distribution module”

In response: Appellant’s assertions are incorrect. As shown in figure 1b, Berry et al. teaches **assembling** (column 27, lines 50-56; note that the combined PDL job/engine ready data gets assembled and transmitted to the destination print queue to be processed) **the plurality of print engine-ready data segment** (column 5, lines 41-49; column 9, lines 49-54; note that the segments are processed into PDL) **received from the one or more distribution responsive printers at the print distribution module** (column 5, lines 4-10; note that the segmented job gets provided by the

distributor to the RIP engine i.e. PRINT1, figure 1b). Therefore, Berry et al. has disclosed the stated argument.

(b) Appellant argues that Berry et al. does not teach or suggest “printing the assembled plurality of print engine-ready data segments at a target printer when the plurality of segments is received from the print distribution module”

In response: Appellant’s assertions are incorrect. As shown in figure 1b, 164, Berry et al. teach **printing the assembled plurality of print engine-ready data segments at a target printer** (column 5, lines 14-18; note that the outputs of the RIP engines or PRINT1-n of figure 1b gets outputted or printed in along path 164 of figure 1b) **when the plurality of segments is received from the print distribution module** (column 4, lines 65-column 5, lines 4; note that the distributor block is provided to distribute multiple segments of the print job to be processed). Therefore, Berry et al. has disclosed the stated argument.

(c) Appellant argues that Berry et al. does not teach or suggest “no printing or processing of the print job output 164 occurs”

In response: Appellant’s assertions are incorrect. Berry et al. teaches in column 4, lines 65-column 5, lines 4; the distributor block is provided to distribute multiple segments of the print job to be processed. It is clear that in figure 1B, 164, the print job gets outputted.

(d) Appellant argues that Berry et al. does not teach or suggest "the print engine-ready data segments by a print distribution module"

In response: Appellant's assertions are incorrect. Berry et al. teaches **the print engine-ready data segments by a print distribution module** (column 5, lines 4-10; note that the segmented job gets provided by the distributor to the RIP engine i.e. PRINT1, figure 1b). It is clear that the print data has already been processed or RIPPed before the assembling process.

(e) Appellant argues that Berry et al. does not teach or suggest "the step of transmitting a first print job segments of the plurality of print job segments to a target printer to be printed and transmitting remaining print job segments to the one or more distribution responsive prints"

In response: Appellant's assertions are incorrect. Berry et al. teach **transmitting a first print job segment of the plurality of print job segments to a target printer to be printed** (column 27, line 66-column 28, line 9; note that the professed segments of print jobs get distributed to one of the plurality of print devices or a virtual print engine) **and transmitting remaining print job segments to the one to more distribution responsive printers** (column 28, lines 12-16; note that the distributor makes its own decision to how to distribute the RIPPED pages to various marking engines). Therefore, Berry et al. has disclosed the stated argument.

(f)) Appellant argues that Berry et al. does not teach or suggest “sending the plurality of print engine-ready data segments from the print distribution module to the target printer”

In response: Appellant’s assertions are incorrect. Berry et al. **sending the plurality of print engine-ready data segments from the print distribution module to the target printer** (column 27, line 66-column 28, lines 3; note that in figure 24, it is shown that the job distributor 1904 sends the segments of data to the virtual printer 2404). Therefore, Berry et al. has disclosed the stated argument.

(g) Appellant argues that Berry et al. does not teach or suggest “transmitting the plurality of print job engine-ready data segments from the distribution responsive printer to the print distribution module”

In response: Appellant’s assertions are incorrect. Berry et al. teach **transmitting the plurality of print job engine-ready data segments from the distribution responsive printers to the print distribution module** (column 11, lines 14-36; note that the plurality of the segments or pages and the segments get distributed as shown in 502 figure 5b). Therefore, Berry et al. has disclosed the stated argument.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

For the above reasons, it is believed that the rejections should be sustained.

Art Unit: 2625

Respectfully submitted,

Hilina S. Kassa

/Hilina S Kassa/

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July 3, 2008

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